ICD-10 Procedure Coding System (ICD-10-PCS)

Development Background

- CMS awarded a contract to 3M Health Information Systems to develop a new procedure coding system
- The new system is intended to replace ICD-9-CM Volume 3 for reporting inpatient procedures

Development History

1995 - 1996:	First draft of ICD-10-PCS completed
1996 - 1997:	Training program developed Informal testing conducted ICD-10-PCS revised
1997 - 1998:	Independent formal testing conducted ICD-10-PCS revised Final draft completed
1998-present	ICD-10-PCS updated annually

Major Development Goals

- Improve accuracy and efficiency of coding
- Reduce training effort
- Improve communication with physicians

Essential Attributes

- Completeness
  - All substantially different procedures have a unique code
- Expandability
  - The structure of the system allows incorporation of new procedures as unique codes

Essential Attributes

Standardized terminology

- Includes definitions of the terminology used.
  - While the meaning of specific words can vary in common usage, ICD-10-PCS defines a single meaning for each term used in the system.

Essential Attributes

Multiaxial

- The system has a multi-axial structure.

  Each character has the same meaning within a section and across sections to the extent possible

General Principles

- Diagnostic information is not included in the code description
- A ‘not elsewhere classified’ option is allowed for new devices and substances
- All substantially different procedures are defined

General Principles
Limited NOS Option

A general body part, approach, or root operation can be used when the level of specificity required is not available in the record or cannot otherwise be obtained

General Principles
Limited NOS Option

- Body Part:
  - Example: “Liver” is used when the specific liver lobe is not identified
- Approach:
  - “Open”, “Percutaneous” and “Via Natural or Artificial Opening”are used when a more specific type of approach is not documented and cannot otherwise be determined
- Root Operation:
  - “Repair” is used when the procedure documentation does not support a specific root operation and the information cannot otherwise be obtained

Code Structure

- Codes are comprised of seven components. Each component is called a “character”
  - All codes are seven characters long
- Individual units for each character are represented by a letter or number
  - Each unit is called a “value”
- 34 possible values for each character
  - Digits 0- 9
  - Letters A-H, J-N, P-Z

System Structure
16 Sections

- Medical and Surgical
- Obstetrics
- Placement
- Administration
- Measurement and Monitoring
- Extracorporeal Assistance and Performance
- Extracorporeal Therapies
- Osteopathic
- Other Procedures
- Chiropractic
- Imaging
- Nuclear Medicine
- Radiation Oncology
- Physical Rehabilitation and Diagnostic Audiology
- Mental Health
- Substance Abuse Treatment

ICD-10-PCS Tables

Each table contains four columns and varying numbers of rows

Column: Specifies the allowable values for characters 4-7

Row: Specifies the valid combinations of values

Example: Table 0DB Excerpt

0DB

Back to Top

Section	**0**	Medical and Surgical
Body System	**D**	Gastrointestinal System
Operation	**B**	Excision: Cutting out or off, without replacement, a portion of a body part

Body Part	*Approach*	*Device*	*Qualifier*
1 Esophagus, Upper **2** Esophagus, Middle **3** Esophagus, Lower **4** Esophagogastric Junction **5** Esophagus **7** Stomach, Pylorus **8** Small Intestine **9** Duodenum **A** Jejunum **B** Ileum **C** Ileocecal Valve **E** Large Intestine **F** Large Intestine, Right **G** Large Intestine, Left	**0** Open **3** Percutaneous **4** Percutaneous Endoscopic **7** Via Natural or Artificial Opening **8** Via Natural or Artificial Opening Endoscopic	**Z** No Device	**X** Diagnostic **Z** No Qualifier

ICD-10-PCS Index

- Provides the first three or four values of the code
- The tables must always be used to obtain the complete code
- No eponyms are included

Index Conventions

- Main index term is a root operation, root procedure type, or common procedure name

  Examples: Resection (root operation)

  Fluoroscopy (root type)

  Prostatectomy (common procedure name)
- Secondary entries are underneath the main term
- PCS Table or code reference as specific as possible

Index Entry by Body Part

Bypass

Aorta, Thoracic **021W**

Aorta, Abdominal **0410**

Artery, Axillary, Left **03160**

Artery, Axillary, Right **03150**

Artery, Brachial, Left **03180**

Artery, Brachial, Right **03170**

Artery, Common Carotid, Left **031J0**

Artery, Common Carotid, Right **031H0**

Medical and Surgical Section

Medical and Surgical Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Part
- 5th Character = Approach
- 6th Character = Device
- 7th Character = Qualifier

Medical and Surgical Section Principles

- The root operation is based on the objective of the procedure

- If multiple procedures as defined by distinct objectives are performed, then multiple codes are assigned

Medical and Surgical Section

Principles

- Root Operation
  - Value is consistent throughout the section
- Approach
  - Value is consistent throughout the section
- Body part
  - Value is consistent within a specific body system

Section Character

Medical and Surgical Section

Section
(Character 1)

- Defines the general type of procedure
- In the Medical and Surgical Section the first character is always the number “0”

Body System Character

Medical and Surgical Section

Body System
(Character 2)

- Defines the general physiological system on which the procedure is performed, or anatomical region where the procedure is performed
- Uses generally accepted anatomical or physiological categories
- Some traditional categories are subdivided into several body systems.
  - Cardiovascular is subdivided into five body systems:

Heart and Great Vessels	Upper Veins
Upper Arteries	Lower Veins
Lower Arteries	

Medical and Surgical Section
Body Systems

Central Nervous
Peripheral Nervous
Heart and Great Vessels
Upper Arteries
Lower Arteries
Upper Veins
Lower Veins
Lymphatic and Hemic
Eye
Ear, Nose, Sinus
Respiratory
Mouth and Throat
Gastrointestinal
Hepatobiliary and Pancreas
Endocrine
Skin and Breast

Subcutaneous Tissue and Fascia
Muscles
Tendons
Bursae and Ligaments
Head and Facial Bones
Upper Bones
Lower Bones
Upper Joints
Lower Joints
Urinary
Female Reproductive
Male Reproductive
Anatomical Regions, General
Anatomical Regions, Upper Extremities
Anatomical Regions, Lower Extremities

Root Operation Character

Medical and Surgical Section

Medical and Surgical Section Root Operation (Character 3)

- Defines the objective of the procedure
- 31 different root operation values
  - Each root operation identifies a precise and distinct objective

Medical and Surgical Section
Root Operations

Alteration
Bypass
Change
Control
Creation
Destruction
Detachment
Dilation
Division
Drainage

Excision
Extirpation
Extraction
Fragmentation
Fusion
Insertion
Inspection
Map
Occlusion
Reattachment

Release
Removal
Repair
Replacement
Reposition
Resection
Restriction
Revision
Supplement
Transfer
Transplantation

Medical and Surgical Section
Root Operation Principles

- The root operation is coded according to the objective of the procedure actually performed
  - Discontinued or modified procedures coded to procedure actually performed
- Composite terms (e.g., colonoscopy, sigmoidectomy) are not root operations

Medical and Surgical Section
Root Operation Principles

- Combination procedures are coded separately
  - Each procedure with a distinct objective during an operative episode is coded separately
- The complete or partial redo of a procedure is coded to the root operation performed rather than *Revision*
  - Revision is confined to correcting a malfunctioning or displaced device

Medical and Surgical Section
Root Operation Groups

- Procedures that take out or eliminate all or a portion of a body part
- Procedures that involve putting in or on, putting back, or moving body parts
- Procedures that take out or eliminate solid matter, fluids, or gases from a body part
- Procedures that only involve examination of body parts and regions

Medical and Surgical Section
Root Operation Groups

- Procedures that can be performed only on tubular body parts
- Procedures that always involve devices
- Procedures involving cutting or separation only
- Procedures involving other repairs
- Procedures with other objectives

Medical and Surgical Section
Root Operations

Procedures that take out or eliminate all or a portion of a body part

- »Excision
- »Resection
- »Extraction
- »Destruction
- »Detachment

Medical and Surgical Section Root Operations

Excision

Definition	Cutting out or off, without replacement, a portion of a body part
Explanation	The qualifier *Diagnostic* is used to identify excision procedures that are biopsies
Examples	Partial nephrectomy Liver biopsy

Medical and Surgical Section

Root Operations

Resection

Definition	Cutting out or off, without replacement, all of a body part
Examples	Total nephrectomy Total lobectomy of lung

Medical and Surgical Section
Root Operations
Extraction

Definition	Pulling or stripping out or off all or a portion of a body part by the use of force
Explanation	The qualifier *Diagnostic* is used to identify extraction procedures that are biopsies
Examples	Dilation and curettage Vein stripping

Medical and Surgical Section
Root Operations
Destruction

Definition	Physical eradication of all or a portion of a body part by the direct use of energy, force or a destructive agent
Explanation	None of the body part is physically taken out
Examples	Fulguration of rectal polyp
	Cautery of skin lesion

Medical and Surgical Section
Root Operations
Detachment

Definition	Cutting off all or part of the upper or lower extremities
Explanation	The body part value is the site of the detachment, with a qualifier if applicable to further specify the level where the extremity was detached
Examples	Below knee amputation Disarticulation of shoulder

Medical and Surgical Section
Root Operations

Procedures that involve putting in or on, putting back, or moving living body parts

- Transplantation
- Reattachment
- Reposition
- Transfer

Medical and Surgical Section
Root Operations
Transplantation

Definition	Putting in or on all or a portion of a living body part taken from another individual or animal to physically take the place and/or function of all or a portion of a similar body part
Explanation	The native body part may or may not be taken out, and the transplanted body part may take over all or a portion of its function
Examples	Kidney transplant Heart transplant

Medical and Surgical Section
Root Operations
Reattachment

Definition	Putting back in or on all or a portion of a separated body part to its normal location or other suitable location
Explanation	Vascular circulation and nervous pathways may or may not be reestablished
Examples	Reattachment of hand Reattachment of avulsed kidney

Medical and Surgical Section
Root Operations
Reposition

Definition	Moving to its normal location or other suitable location all or a portion of a body part
Explanation	The body part is moved to a new location from an abnormal location, or from a normal location where it is not functioning correctly. The body part may or may not be cut out or off to be moved to the new location
Examples	Reposition of undescended testicle Fracture reduction

Medical and Surgical Section
Root Operations
Transfer

Definition	Moving, without taking out, all or a portion of a body part to another location to take over the function of all or a portion of a body part
Explanation	The body part transferred remains connected to its vascular and nervous supply
Examples	Tendon transfer Skin pedicle flap transfer

Medical and Surgical Section Root Operations

Procedures that take out or eliminate solid matter, fluids or gases from a body part

- Drainage
- Extirpation
- Fragmentation

Medical and Surgical Section
Root Operations
Drainage

Definition	Taking or letting out fluids and/or gases from a body part
Explanation	The qualifier *Diagnostic* is used to identify drainage procedures that are biopsies
Examples	Thoracentesis Incision and drainage

Medical and Surgical Section
Root Operations
Extirpation

Definition	Taking or cutting out solid matter from a body part
Explanation	The solid matter may be an abnormal byproduct of a biological function or a foreign body; it may be imbedded in a body part or in the lumen of a tubular body part. The solid matter may or may not have been previously broken into pieces
Examples	Thrombectomy Choledocholithotomy

Medical and Surgical Section
Root Operations
Fragmentation

Definition	Breaking solid matter in a body part into pieces
Explanation	Physical force (e.g., manual, ultrasonic) applied directly or indirectly is used to break the solid matter into pieces. The solid matter may be an abnormal byproduct of a biological function or a foreign body. The pieces of solid matter are not taken out
Examples	Extracorporeal shockwave lithotripsy Transurethral lithotripsy

Medical and Surgical Section Root Operations

Procedures that only involve examination of body parts and regions

»Inspection

»Map

Medical and Surgical Section
Root Operations
Inspection

Definition	Visually and/or manually exploring a body part
Explanation	Visual exploration may be performed with or without optical instrumentation. Manual exploration may be performed directly or through intervening body layers
Examples	Diagnostic arthroscopy Exploratory laparotomy

Medical and Surgical Section
Root Operations
Map

Definition	Locating the route of passage of electrical impulses and/or locating functional areas in a body part
Explanation	Applicable only to the cardiac conduction mechanism and the central nervous system
Examples	Cardiac mapping Cortical mapping

Medical and Surgical Section Root Operations

Procedures that can be performed only on tubular body parts

- »Bypass
- »Dilation
- »Occlusion
- »Restriction

Medical and Surgical Section
Root Operations
Bypass

Definition	Altering the route of passage of the contents of a tubular body part
Explanation	Rerouting contents of a body part to a downstream area of the normal route, to a similar route and body part, or to an abnormal route and dissimilar body part. Includes one or more anastomoses, with or without the use of a device
Examples	Coronary artery bypass Colostomy formation

Medical and Surgical Section
Root Operations
Dilation

Definition	Expanding an orifice or the lumen of a tubular body part
Explanation	The orifice can be a natural orifice or an artificially created orifice. Accomplished by stretching a tubular body part using intraluminal pressure or by cutting part of the orifice or wall of the tubular body part
Examples	Percutaneous transluminal angioplasty Pyloromyotomy

Medical and Surgical Section
Root Operations
Occlusion

Definition	Completely closing the orifice or lumen of a tubular body part
Explanation	The orifice can be a natural orifice or an artificially created orifice
Example	Fallopian tube ligation Ligation of inferior vena cava

Medical and Surgical Section
Root Operations
Restriction

Definition	Partially closing the orifice or lumen of a tubular body part
Explanation	The orifice can be a natural orifice or an artificially created orifice
Examples	Esophagogastric fundoplication Cervical cerclage

Medical and Surgical Section Root Operations

Procedures that always involve devices

- Insertion
- Replacement
- Supplement
- Removal
- Change
- Revision

Medical and Surgical Section
Root Operations
Insertion

Definition	Putting in a nonbiological appliance that monitors, assists, performs or prevents a physiological function but does not physically take the place of a body part
Examples	Insertion of radioactive implant Insertion of central venous catheter

Medical and Surgical Section
Root Operations
Replacement

Definition	Putting in or on biological or synthetic material that physically takes the place and/or function of all or a portion of a body part
Explanation	The body part may have been taken out or replaced, or may be taken out, physically eradicated, or rendered nonfunctional during the Replacement procedure. A Removal procedure is coded for taking out the device used in a previous replacement procedure
Examples	Total hip replacement, bone graft Free skin graft

Medical and Surgical Section
Root Operations
Supplement

Definition	Putting in or on biological or synthetic material that physically reinforces or augments the function of a body part
Explanation	The biological material is non-living, or the biological material is living and from the same individual. The body part may have been previously replaced. If the body part has been previously replaced, the *Supplement* procedure is performed to physically reinforce and/or augment the function of the replaced body part
Examples	Herniorrhaphy using mesh, free nerve mitral valve ring annuloplasty, put a new acetabular liner in a previous hip replacement

Medical and Surgical Section
Root Operations
Removal

Definition	Taking out or off a device from a body part
Explanation	If a device is taken out and a similar device put in without cutting or puncturing the skin or mucous membrane, the procedure is coded to the root operation *Change*. Otherwise, the procedure for taking out a device is coded to the root operation *Removal*
Examples	Drainage tube removal Cardiac pacemaker removal

Medical and Surgical Section
Root Operations
Change

Definition	Taking out or off a device from a body part and putting back an identical or similar device in or on the same body part without cutting or puncturing the skin or a mucous membrane
Explanation	All Change procedures are coded using the approach *External*
Examples	Urinary catheter change Gastrostomy tube change

Medical and Surgical Section
Root Operation
Revision

Definition	Correcting, to the extent possible, a malfunctioning or displaced device
Explanation	Revision can include correcting a malfunctioning or displaced device by taking out or putting in components of the device such as a screw
Examples	Adjustment of position of pacemaker lead Recementing of hip prosthesis

Medical and Surgical Section Root Operations

Procedures involving cutting or separation only

- »Division
- »Release

Medical and Surgical Section
Root Operations
Division

Definition	Cutting into a body part without draining fluids and/or gasses from the body part in order to separate or transect a body part
Explanation	All or a portion of the body part is separated into two or more portions
Examples	Spinal cordotomy, osteotomy

Medical and Surgical Section
Root Operations
Release

Definition	Freeing a body part from an abnormal physical constraint by cutting or by use of force
Explanation	Some of the restraining tissue may be taken out but none of the body part is taken out
Examples	Adhesiolysis Carpal tunnel release

Medical and Surgical Section Root Operations

Procedures involving other repairs

»Control

»Repair

Medical and Surgical Section
Root Operations
Control

Definition	Stopping, or attempting to stop, post-procedure bleeding
Explanation	The site of the bleeding is coded as an anatomical region and not to a specific body part
Examples	Control of post-prostatectomy hemorrhage Control of post-tonsillectomy hemorrhage

Medical and Surgical Section
Root Operations
Repair

Definition	Restoring, to the extent possible, a body part to its normal anatomic structure and function
Explanation	Used only when the method to accomplish the repair is not one of the other root operations
Examples	Colostomy takedown Suture of laceration

Medical and Surgical Section Root Operations

Procedures with other objectives

»Alteration

»Creation

»Fusion

Medical and Surgical Section
Root Operations
Alteration

Definition	Modifying the anatomical structure of a body part without affecting the function of the body part
Explanation	Principal purpose is to improve appearance
Examples	Face lift Breast augmentation

Medical and Surgical Section
Root Operations
Creation

Definition	Making a new genital structure that does not take over the function of a body part
Explanation	Used only for sex change operations
Examples	Creation of vagina in a male Creation of penis in a female

Medical and Surgical Section
Root Operations
Fusion

Definition	Joining together portions of an articular body part rendering the articular body part immobile
Explanation	The body part is joined together by fixation device, bone graft, or other means
Examples	Spinal fusion Ankle arthrodesis

Body Part Character

Medical and Surgical Section

Medical and Surgical Section Body Part Character

(Character 4)

- Defines the specific anatomical site where the procedure is performed
- 34 possible body part values in each body system

Medical and Surgical Section
Body Part Values
Hepatobiliary and Pancreas

Liver

Liver, Right Lobe

Liver, Left Lobe

Gallbladder

Hepatic Duct, Right

Hepatic Duct, Left

Cystic Duct

Common Bile Duct

Ampulla of Vater

Pancreatic Duct

Pancreatic Duct, Accessory

Pancreas

Approach Character

Medical and Surgical Section

Medical and Surgical Section Approach
(Character 5)

- Defines the technique used to reach the site of the procedure

- 7 different approach values

Medical and Surgical Section Approach

Approaches through the skin or mucous membrane

- Open
- Percutaneous
- Percutaneous Endoscopic

Medical and Surgical Section Approach Definitions

OPEN

Cutting through the skin or mucous membrane and any other body layers necessary to expose the site of the procedure

Example: Abdominal hysterectomy

Medical and Surgical Section Approach Definitions

PERCUTANEOUS

Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach the site of the procedure

Example: Needle biopsy of liver

Medical and Surgical Section Approach Definitions

PERCUTANEOUS ENDOSCOPIC

Entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to reach and visualize the site of the procedure

Example: Arthroscopy

Medical and Surgical Section Approach

Approaches through an orifice

- Via Natural or Artificial Opening
- Via Natural or Artificial Opening Endoscopic
- Via Natural or Artificial Opening with Percutaneous Endoscopic Assistance

Medical and Surgical Section Approach Definitions

VIA NATURAL OR ARTIFICIAL OPENING

Entry of instrumentation through a natural or artificial external opening to reach the site of the procedure

Example: Endotracheal intubation

Medical and Surgical Section Approach Definitions

VIA NATURAL OR ARTIFICIAL OPENING ENDOSCOPIC

Entry of instrumentation through a natural or artificial external opening to reach and visualize the site of the procedure

Example: Sigmoidoscopy

Medical and Surgical Section Approach Definitions

VIA NATURAL OR ARTIFICIAL OPENING WITH PERCUTANEOUS ENDOSCOPIC ASSISTANCE

Entry of instrumentation through a natural or artificial external opening and entry, by puncture or minor incision, of instrumentation through the skin or mucous membrane and any other body layers necessary to aid in the performance of the procedure

Example: Laparoscopic-assisted vaginal hysterectomy

Medical and Surgical Section Approach Definitions

EXTERNAL

Procedures performed directly on the skin or mucous membrane and procedures performed indirectly by the application of external force through the skin or mucous membrane

Example: Closed fracture reduction

Device Character

Medical and Surgical Section

Medical and Surgical Section

Device Character

(Character 6)

- The term “device” includes only devices that remain after the procedure is completed
- Instruments that describe how a procedure is performed are not specified in the device character
  - Instruments for visualization are specified in the approach character
- Materials incidental to a procedure such as clips and sutures are not considered devices

Medical and Surgical Section Device Categories

- Biological or synthetic material that takes the place of all or a portion of a body part (e.g., skin graft, joint prosthesis)

- Biological or synthetic material that assists or prevents a physiological function (e.g., urinary catheter, IUD)

Medical and Surgical Section Device Categories

- Therapeutic material that is not absorbed by, eliminated by, or incorporated into a body part (e.g., radioactive implant, orthopedic pins). Therapeutic materials that are considered devices can be removed

- Mechanical or electronic appliances used to assist, monitor, take the place of, or prevent a physiological function (e.g., diaphragmatic pacemaker, hearing device)

Medical and Surgical Section Examples of Device Values

- Drainage Device
- Radioactive Element
- Autologous Tissue Substitute
- Extraluminal Device
- Intraluminal Device
- Synthetic Substitute
- Nonautologous Tissue Substitute

Qualifier

Medical and Surgical Section

Medical and Surgical Section Qualifier

(Character 7)

- Defines an additional attribute of the procedure performed, if applicable
- May have a narrow application, to a specific root operation, body system, or body part

Medical and Surgical Section Examples of Qualifiers

- Type of transplant
- Second site for a bypass
- Diagnostic excision (biopsy)

Obstetrics Section

Obstetrics Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Part
- 5th Character = Approach
- 6th Character = Device
- 7th Character = Qualifier

Obstetrics Section

- Includes only procedures performed on the products of conception
- Operations on the pregnant female are coded in the Medical and Surgical section (e.g., episiotomy)
- Two root operations unique to this section
- Other root operations same as Medical and Surgical section (e.g., Drainage, Inspection)

Obstetrics Section
Body System
(Character 2)

Contains a single body system:

- Pregnancy

Obstetrics Section
Root Operation
(Character 3)

Abortion: Artificially terminating a pregnancy

Delivery: Assisting the passage of the products of conception from the genital canal

Obstetrics Section
Body Part
(Character 4)

Contains three different values for body part

- Products of Conception
- Products of Conception, Retained
- Products of Conception, Ectopic

Obstetrics Section
Body Part

- Products of conception refers to all components of a pregnancy, including the fetus, embryo, amnion, umbilical cord and placenta
- There is no differentiation of the products of conception based on gestational age

Obstetrics Section
Device
(Character 6)

Some device values unique to this section

Examples:

Laminaria

Abortifacient

Monitoring Electrode

Obstetrics Section Qualifier
(Character 7)

Values are dependent on the root operation, approach, or body part

Examples (root operation dependent):

- Method of extraction (e.g., low forceps, vacuum)
- Substance drained (e.g., amniotic fluid, fetal blood)

Obstetrics Section Table 10D

10D

Back to Top

Section	**1**	Obstetrics
Body System	**0**	Pregnancy
Operation	**D**	Extraction: Pulling or stripping out or off all or a portion of a body part by the use of force

Body Part	*Approach*	*Device*	*Qualifier*
0 Products of Conception	**0** Open	**Z** No Device	**0** Classical **1** Low Cervical **2** Extraperitoneal
0 Products of Conception	**7** Via Natural or Artificial Opening	**Z** No Device	**3** Low Forceps **4** Mid Forceps **5** High Forceps **6** Vacuum **7** Internal Version **8** Other
1 Products of Conception, Retained **2** Products of Conception, Ectopic	**7** Via Natural or Artificial Opening **8** Via Natural or Artificial Opening Endoscopic	**Z** No Device	**Z** No Qualifier

Placement Section

Placement Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Region/ Orifice
- 5th Character = Approach
- 6th Character = Device
- 7th Character = Qualifier

Placement Section
Body System
(Character 2)

Contains two body system values:

- Anatomical Regions
- Anatomical Orifices

Placement Section
Root Operation
(Character 3)

- Five root operations unique to this section
  - Compression
  - Dressing
  - Immobilization
  - Packing
  - Traction
- Two root operations common to other sections
  - Change
  - Removal

Placement Section
Root Operation
(Character 3)

Compression:	Putting pressure on a body region
Dressing:	Putting material on a body region for protection
Immobilization:	Limiting or preventing motion of a body region
Packing:	Putting material in a body region or orifice
Traction:	Exerting a pulling force on a body region in a distal direction

Placement Section
Body Regions/Orifices
(Character 4)

- Two types of values:
  - External body regions (e.g., chest wall)
  - Natural orifices (e.g., mouth and pharynx)

Placement Section
Device
(Character 6)

- Specifies the material or device in the placement procedure (e.g., splint, bandage)
- Includes casts for fractures and dislocations
- Devices in the placement section are off the shelf and do not require any extensive design, fabrication or fitting
- The placement of devices that require extensive design, fabrication or fitting are coded in the Rehabilitation section

Placement Section
Table 2Y4

2Y4

Back to Top

Section	**2**	Placement
Body System	**Y**	Anatomical Orifices
Operation	**4**	Packing: Putting material in a body region or orifice

Body Region	*Approach*	*Device*	*Qualifier*
0 Mouth and Pharynx **1** Nasal **2** Ear **3** Anorectal **4** Female Genital Tract **5** Urethra	**X** External	**5** Packing Material	**Z** No Qualifier

Administration Section

Administration Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological System
- 3rd Character = Root Operation
- 4th Character = Body System/ Region
- 5th Character = Approach
- 6th Character = Substance
- 7th Character = Qualifier

Administration Section
Body System
(Character 2)

Contains three body system values:

- Physiological Systems and Anatomical Regions
- Circulatory
- Indwelling Device

Administration Section
Root Operation
(Character 3)

Physiological Systems and Anatomical Regions

Introduction: Putting in a therapeutic, diagnostic, nutritional, physiological or prophylactic substance except blood or blood products

Irrigation: Putting in or on a cleansing substance

Administration Section
Root Operation
(Character 3)

Circulatory System

Transfusion: Putting in blood or blood products

Administration Section
Root Operation
(Character 3)

Indwelling Device

Irrigation: Putting in or on a cleansing substance

Administration Section
Body Part
(Character 4)

- For Introduction, the body part specifies where the procedure occurs and not necessarily the site where the substance introduced has an effect
- For Irrigation, the body part specifies the site of the irrigation

Administration Section Approach (Character 5)

- Approach uses values defined in the Medical and Surgical section
- The approach value for intradermal, subcutaneous and intramuscular introductions (i.e., injections) is percutaneous
- If a catheter is used to introduce a substance into a site within the circulatory system, the approach value is also percutaneous

Administration Section Substance (Character 6)

- Substances are specified in broad categories
- Substance values depend on body part

Administration Section
Substance
Physiological System & Anatomical Regions

Examples:

Antineoplastic

Thrombolytic

Anti-infective

Anti-inflammatory

Radioactive Substance

Nutritional Substance

Electrolytic and Water Balance Substance

Irrigating Substance

Dialysate

Local Anesthetic

Regional Anesthetic

Inhalation Anesthetic

Gas

Contrast Agent

Fertilized Ovum

Sperm

Pigment

Platelet Inhibitor

Destructive Agent

Administration Section
Substance
Circulatory System

Examples:

Serum Albumin

Frozen Plasma

Fresh Plasma

Plasma Cryoprecipitate

Red Blood Cells

Stem Cells, Hematopoietic

White Cells

Platelets

Globulin

Fibrinogen

Factor IX

Bone Marrow

Administration Section Qualifier (Character 7)

- May further specify a substance
- *Examples:*
  - High-dose Interleukin-2
  - Liquid Brachytherapy Isotope
  - Insulin

Administration Section

Table 302 Excerpt

302

Back to Top

Section	**3**	Administration
Body System	**0**	Circulatory
Operation	**2**	Transfusion: Putting in blood or blood products

Body System / Region	*Approach*	*Substance*	*Qualifier*
3 Peripheral Vein **4** Central Vein	**0** Open **3** Percutaneous	**A** Stem Cells, Embryonic	**Z** No Qualifier
3 Peripheral Vein **4** Central Vein	**0** Open **3** Percutaneous	**G** Bone Marrow **H** Whole Blood **J** Serum Albumin **K** Frozen Plasma **L** Fresh Plasma **M** Plasma Cryoprecipitate **N** Red Blood Cells **P** Frozen Red Cells **Q** White Cells **R** Platelets **S** Globulin **T** Fibrinogen **V** Antihemophilic Factors **W** Factor IX **X** Stem Cells, Cord Blood **Y** Stem Cells, Hematopoietic	**0** Autologous **1** Nonautologous

Measurement and Monitoring Section

Measurement and Monitoring Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological System
- 3rd Character = Root Operation
- 4th Character = Body System
- 5th Character = Approach
- 6th Character = Function
- 7th Character = Qualifier

Measurement and Monitoring Body System

(Character 2)

Contains a single body system value:

- Physiological Systems

Measurement and Monitoring Root Operation

(Character 3)

- **Measurement**: Determining the level of a physiological or physical function at a point in time

- **Monitoring**: Determining the level of a physiological or physical function repetitively over a period of time

Measurement and Monitoring Approach
(Character 5)

Approach contains values also in the Medical and Surgical section

Examples:

Percutaneous

Via Natural or Artificial Opening
Endoscopic

Measurement and Monitoring Function
(Character 6)

Specifies physiological or physical functions (e.g., nerve conductivity, cardiac electrical activity, respiratory capacity)

Measurement and Monitoring
Table 4A1 Excerpt

4A1

Back to Top

Section	**4**	Measurement and Monitoring
Body System	**A**	Physiological Systems
Operation	**1**	Monitoring: Determining the level of a physiological or physical function repetitively over a period of time

Body System	*Approach*	*Function / Device*	*Qualifier*
0 Central Nervous	**0** Open	**2** Conductivity **B** Pressure	**Z** No Qualifier
0 Central Nervous	**0** Open	**4** Electrical Activity	**G** Intraoperative **Z** No Qualifier
0 Central Nervous	**3** Percutaneous	**4** Electrical Activity	**G** Intraoperative **Z** No Qualifier
0 Central Nervous	**3** Percutaneous	**B** Pressure **K** Temperature **R** Saturation	**D** Intracranial
0 Central Nervous	**7** Via Natural or Artificial Opening	**B** Pressure **K** Temperature **R** Saturation	**D** Intracranial
0 Central Nervous	**X** External	**2** Conductivity	**Z** No Qualifier
0 Central Nervous	**X** External	**4** Electrical Activity	**G** Intraoperative **Z** No Qualifier

Extracorporeal Assistance and Performance Section

Extracorporeal Assistance and Performance Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological System
- 3rd Character = Root Operation
- 4th Character = Body System
- 5th Character = Duration
- 6th Character = Function
- 7th Character = Qualifier

Extracorporeal Assistance and Performance

Body System (Character 2)

Contains a single body system value:

- Physiological Systems

Extracorporeal Assistance and Performance Root Operation (Character 3)

Assistance: Taking over a portion of a physiological function by extracorporeal means

Performance: Completely taking over a physiological function by extracorporeal means

Restoration: Returning, or attempting to return, a physiological function to its normal state by extracorporeal means

Extracorporeal Assistance and Performance

Duration

(Character 5)

- Specifies whether the procedure was a single occurrence, multiple occurrence, intermittent, or continuous

- For respiratory ventilation assistance or performance, the range of hours is specified (<24 hours, 24-96 hours or >96 hours)

Extracorporeal Assistance and Performance

Function

(Character 6)

Specifies the physiological function assisted or performed (e.g., oxygenation, ventilation)

Extracorporeal Assistance and Performance Qualifier (Character 7)

May specify equipment used in the procedure (e.g., balloon pump)

Extracorporeal Assistance and Performance Table 5A2

5A2

Back to Top

Section	**5**	Extracorporeal Assistance and Performance
Body System	**A**	Physiological Systems
Operation	**2**	Restoration: Returning, or attempting to return, a physiological function to its original state by extracorporeal means.

Body System	*Duration*	*Function*	*Qualifier*
2 Cardiac	**0** Single	**4** Rhythm	**Z** No Qualifier

Extracorporeal Therapies Section

Extracorporeal Therapies Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological System
- 3rd Character = Root Operation
- 4th Character = Body System
- 5th Character = Duration
- 6th Character = Qualifier
- 7th Character = Qualifier

Extracorporeal Therapies Body System (Character 2)

Contains a single body system value:

- Physiological Systems

Extracorporeal Therapies Root Operation (Character 3)

Contains ten root operation values:

Atmospheric Control

Decompression

Electromagnetic Therapy

Hyperthermia

Hypothermia

Pheresis

Phototherapy

Ultrasound Therapy

Ultraviolet Light Therapy

Shock Wave Therapy

Extracorporeal Therapies Duration
(Character 5)

Specifies whether the procedure was a single occurrence, multiple occurrence, or intermittent

Osteopathic Section

Osteopathic Section

Character Specification

- 1st Character = Section
- 2nd Character = Anatomical Regions
- 3rd Character = Root Operation
- 4th Character = Body Region
- 5th Character = Approach
- 6th Character = Method
- 7th Character = Qualifier

Osteopathic Section
Body System
(Character 2)

Contains a single body system value:

- Anatomical Regions

Osteopathic Section
Root Operation
(Character 3)

Contains a single root operation value

Treatment:

- Manual treatment to eliminate or alleviate somatic dysfunction and related disorders

Osteopathic Section Method (Character 6)

- Articulatory - Raising
- Fascial Release
- General Mobilization
- High Velocity - Low Amplitude
- Indirect
- Low Velocity- High Amplitude
- Lymphatic Pump
- Muscle Energy - Isometric
- Muscle Energy - Isotonic
- Other Method

Other Procedures Section

Other Procedures Section

Character Specification

- 1st Character = Section
- 2nd Character = Physiological Systems/ Anatomical Regions
- 3rd Character = Root Operation
- 4th Character = Body Region
- 5th Character = Approach
- 6th Character = Method
- 7th Character = Qualifier

Other Procedures Section
Root Operation
(Character 3)

Contains a single root operation value

Other Procedures:

– Methodologies which attempt to remediate or cure a disorder or disease

Other Procedures Section
Body Region
(Character 4)

Contains physiological system and anatomical region values:

- Nervous System
- Circulatory System
- Head and Neck Region
- Integumentary System and Breast
- Musculoskeletal System
- Female Reproductive System
- Male Reproductive System
- Trunk Region
- Upper Extremity
- Lower Extremity
- None

Miscellaneous Section Method (Character 6)

- Acupuncture
- Therapeutic Massage
- Collection
- Computer Assisted Procedure
- Robotic Assisted Procedure
- Near Infrared Spectroscopy
- Other Method

Chiropractic Section

Chiropractic Section

Character Specification

- 1st Character = Section
- 2nd Character = Anatomical Regions
- 3rd Character = Root Operation
- 4th Character = Body Region
- 5th Character = Approach
- 6th Character = Method
- 7th Character = Qualifier

Chiropractic Section Body System (Character 2)

Contains a single body system value:

- Anatomical Regions

Chiropractic Section
Root Operation
(Character 3)

Contains a single root operation value

Manipulation:

- Manual procedure that involves a directed thrust to move a joint past the physiological range of motion, without exceeding the anatomical limit

Chiropractic Section Method

(Character 6)

- Non-Manual
- Indirect Visceral
- Extra-Articular
- Direct Visceral
- Long Lever Specific Contact
- Long and Short Lever Specific Contact
- Mechanically Assisted
- Other Method

Imaging Section

Imaging Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Body Part
- 5th Character = Contrast
- 6th Character = Qualifier
- 7th Character = Qualifier

Imaging Section

- Contains diagnostic radiology procedures
  - Nuclear medicine is a separate section
  - Radiation Oncology is a separate section
  - Interventional Radiology
    - The intervention procedure is coded in the Medical and Surgical section

Imaging Section
Root Type
(Character 3)

- Plain Radiography
- Fluoroscopy
- CT Scan
- MRI
- Ultrasound

Imaging Section
Root Type Definitions

(Character 3)

Imaging Section
Root Type
Plain Radiography

Planar display of an image developed from the capture of external ionizing radiation on photographic or photoconductive plate

Imaging Section
Root Type

Fluoroscopy

Single plane or bi-plane real time display of an image developed from the capture of external ionizing radiation on a fluorescent screen. The image may also be stored by either digital or analog means

Imaging Section

Root Type

Computerized Tomography (CT Scan)

Computer-reformatted digital display of multiplanar images developed from the capture of multiple exposures of external ionizing radiation

Imaging Section
Root Type
Magnetic Resonance Imaging (MRI)

Computer-reformatted digital display of multiplanar images developed from the capture of radio-frequency signals emitted by nuclei in a body site excited within a magnetic field

Imaging Section
Root Type
Ultrasonography

Real time display of images of anatomy or flow information developed from the capture of reflected and attenuated high frequency sound waves

Imaging Section
Contrast Material
(Character 5)

- Contrast is differentiated by the concentration of the contrast material (e.g., high or low osmolar)

Imaging Section Qualifier

(Character 6)

- Specifies an imaging procedure without contrast followed by contrast

Nuclear Medicine Section

Nuclear Medicine Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Body Part
- 5th Character = Radionuclide
- 6th Character = Qualifier
- 7th Character = Qualifier

Nuclear Medicine Section Type Definitions
(Character 3)

Nuclear Medicine
Root Type
Planar Imaging

Introduction of radioactive materials into the body for a single plane display of images developed from the capture of radioactive emissions

Nuclear Medicine

Root Type

Tomographic (Tomo) Imaging

Introduction of radioactive materials into the body for three dimensional display of images developed from the capture of radioactive emissions

Nuclear Medicine

Root Type

Positron Emission Tomographic (PET) Imaging

Introduction of radioactive materials into the body for three dimensional display of images developed from the simultaneous capture, 180 degrees apart, of radioactive emissions

Nuclear Medicine
Root Type
Nonimaging Uptake

Introduction of radioactive materials into the body for measurements of organ function, from the detection of radioactive emissions

Nuclear Medicine
Root Type
Nonimaging Probe

Introduction of radioactive materials into the body for the study of distribution and fate of certain substances by the detection of radioactive emissions; or, alternatively, measurement of absorption of radioactive emissions from an external source

Nuclear Medicine
Root Type
Nonimaging Assay

Introduction of radioactive materials into the body for the study of body fluids and blood elements, by the detection of radioactive emissions

Nuclear Medicine

Root Type

Systemic Therapy

Introduction of unsealed radioactive materials into the body for treatment

Nuclear Medicine Section
Body Part
(Character 4)

- Indicates the body part or region to the degree of specificity that is usual and appropriate for the section
- Regional (e.g., lower extremity veins) and combination body parts (e.g., liver and spleen) are commonly used

Nuclear Medicine Section Radionuclide

(Character 5)

- Character 5 is the source of the radiation
- An “Other Radionuclide” option is included for new FDA approved radiopharmaceuticals

Radiation Therapy Section

Radiation Therapy Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Treatment Site
- 5th Character = Modality Qualifier
- 6th Character = Isotope
- 7th Character = Qualifier

Radiation Therapy Section
Root Type
(Character 3)

Classified by the basic mode of radiation delivery used:

- Beam Radiation
- Brachytherapy
- Stereotactic Radiosurgery
- Other Radiation

Radiation Therapy Section Treatment Site (Character 4)

Specifies the body part that is the target of the radiation therapy

Radiation Therapy Section Modality Qualifier (Character 5)

Further specifies the type of radiation used:

- photons
- electrons
- heavy particles
- contact radiation

Radiation Therapy Section
Isotope
(Character 6)

- Specifies the isotope administered in oncology treatments

Physical Rehabilitation and Diagnostic Audiology Section

Physical Rehabilitation and Diagnostic Audiology Section

Character Specification

- 1st Character = Section
- 2nd Character = Section Qualifier
- 3rd Character = Root Type
- 4th Character = Body System and Region
- 5th Character = Type Qualifier
- 6th Character = Equipment
- 7th Character = Qualifier

Physical Rehabilitation and Diagnostic Audiology Root Type (Character 3)

Treatment:

Use of specific activities or methods to develop, improve and/or restore the performance of necessary functions, compensate for dysfunction and /or minimize debilitation

Assessment:

Includes a determination of the patient's diagnosis when appropriate, need for treatment, planning for treatment, periodic assessment and documentation related to these activities

Physical Rehabilitation and Diagnostic Audiology
Root Type
(Character 3)

- **Fitting(s):**

  Design, fabrication, modification, selection and/or application of splint, orthosis, prosthesis, hearing aids and/or rehabilitation device

- **Caregiver Training**:

  Educating caregiver with the skills and knowledge used to interact with and assist the patient

Physical Rehabilitation and Diagnostic Audiology Body System and Region (Character 4)

- Body Systems
  - Neurological System
  - Circulatory System
  - Respiratory System
  - Integumentary System
  - Musculoskeletal System
  - Genitourinary System
- Body Regions

  - Head and Neck
  - Upper Back/Upper Extremity
  - Lower Back/Lower Extremity
  - Whole Body

Physical Rehabilitation and Diagnostic Audiology Type Qualifier (Character 5)

Specifies the precise test or method employed

Examples:

- Therapeutic exercise treatment
- Dressing or transfer assessment
- Prosthesis fitting
- Transfer caregiver training

Physical Rehabilitation and Diagnostic Audiology Equipment (Character 6)

- Specific types of equipment are not listed
- General categories of equipment are listed (e.g., physical agents, mechanical modalities, assistive/adaptive/supportive devices)

Mental Health Section

Mental Health Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Type Qualifier
- 5th Character = Qualifier
- 6th Character = Qualifier
- 7th Character = Qualifier

Mental Health Section
Root Type
(Character 3)

Psychological Tests

Crisis Intervention

Medication Management

Individual Psychotherapy

Counseling

Family Psychotherapy

Electroconvulsive Therapy

Biofeedback

Hypnosis

Narcosynthesis

Group Psychotherapy

Light Therapy

Mental Health Section Type Qualifier (Character 4)

- Type qualifier provides additional specificity
- Not all types have type qualifier

Mental Health Section Type Qualifier

(Character 4)

Example:

Psychological Tests

- Developmental
- Personality and Behavioral
- Intellectual and Psychoeducational
- Neuropsychological
- Neurobehavioral and Cognitive Status

Mental Health Section Qualifier
(Character 5 - 7)

Have a value of “Z” None

Substance Abuse Treatment Section

Substance Abuse Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Type
- 4th Character = Type Qualifier
- 5th Character = Qualifier
- 6th Character = Qualifier
- 7th Character = Qualifier

Substance Abuse Treatment Root Type (Character 3)

Detoxification Services

Individual Counseling

Group Counseling

Individual Psychotherapy

Family Counseling

Medication Management

Pharmacotherapy

Substance Abuse Treatment Type Qualifier (Character 4)

- Type qualifier provides additional specificity
- Not all types have type qualifier

Substance Abuse Treatment Type Qualifier (Character 4)

Example:

Pharmacotherapy

- Nicotine Replacement Therapy
- Methadone Maintenance
- LAAM
- Antabuse
- Naltrexone
- Naloxone
- Clonidine
- Bupropion
- Psychiatric Medications
- Other Replacement Medication

Substance Abuse Treatment Qualifier
(Character 5 - 7)

Have a value of “Z” None

New Technology Section

New Technology Section

Character Specification

- 1st Character = Section
- 2nd Character = Body System
- 3rd Character = Root Operation
- 4th Character = Body Part
- 5th Character = Approach
- 6th Character = Device/Substance/Technology
- 7th Character = Qualifier

New Technology Section Root Operation (Character 3)

Uses the same root operation values as their counterparts in other sections of ICD-10-PCS

- Example: The root operation Introduction has the same definition as its counterpart in Administration section of ICD-10-PCS

New Technology Section
Body Part
(Character 4)

Uses the same body part values that are used in other sections of ICD-10-PCS.

- Example: Central Vein body part value has its counterpart in the Administration section of ICD-10-PCS

New Technology Section Approach (Character 5)

Uses the same approach values as their closest counterparts in other sections of ICD-10-PCS.

- External
- Open
- Percutaneous
- Percutaneous Endoscopic
- Via Natural or Artificial Opening
- Via Natural or Artificial Opening Endoscopic
- Via Natural or Artificial Opening With Percutaneous Endoscopic Assistance

New Technology Section Device/Substance/Technology (Character 6)

- Contains a general description of the key feature of the new technology
- Example: Ceftazidime-Avibactam Anti-infective is an example of a new technology substance

New Technology Section Qualifier (Character 7)

- Used exclusively to indicate the New Technology Group
- A number or letter that changes each year that new technology codes are added to the system
- Allows the ICD-10-PCS to “recycle” the values in the third, fourth, and sixth characters as needed

ICD-10-PCS Testing

ICD-10-PCS Testing

- Tested by Clinical Data Abstraction Centers (CDACs)
  - FMAS, Columbia, MD
  - DynKePRO, York, PA
- Coded 5,000 records
  - Offered feedback on issues found
  - Suggested improvements
- Additional comparison test of 100 records
- Additional testing on ambulatory records

Major Modifications as a Result of Testing

- Limited Not Otherwise Specified (NOS) options added
- Number of approaches reduced
- Training manual revised
- Index entries added

Testing Findings

- More complete than ICD-9-CM, greater specificity
- Easy to expand the system
- Multi-axial structure makes it easier to analyze
- Standardized terminology makes it easier to use once the coder has initial training

Testing Findings

Initial training time will be a factor since it differs significantly from ICD-9-CM

- Having all terms defined makes it easier to teach
- Once basic knowledge is acquired, the coder does not use the index